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Leonid Kulikov

Grammaticalization of reciprocal pronouns in Indo-Aryan: Evidence from Sanskrit and Indo-European for a diachronic typology of reciprocal constructions

Abstract: This paper focuses on the evolution of the Old Indo-Aryan reciprocal pronoun *anyo'nya-* as well as some related forms, tracing its grammaticalization from the early Vedic period onwards until the beginning of the Middle Indic period. On the basis of a comparison of the history of this formation with similar processes documented in some other Indo-European branches (Greek, Slavic etc.), I uncover some basic mechanisms and scenarios of the evolution of reciprocal constructions attested in the history of Indo-Aryan languages in a diachronic typological context, offering a number of typological generalizations on the diachrony of reciprocals.

Keywords: reciprocal pronoun, reciprocal construction, Vedic, Sanskrit, Pāli, Indo-European, Indo-Aryan, diachronic typology, grammaticalization, agreement, gender, case, adverbial

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In memory of Vladimir Nedjalkov (1928–2009), the great typologist and researcher of reciprocals

1 Introductory remarks

The present paper deals with the evolution of the Indo-Aryan reciprocal pronoun as well as a number of related formations, tracing its development from a combination of two independent words (*anyó* . . . *anyá-*) to one single grammaticalized unit, the reciprocal pronoun *anyo'nya-*. I will demonstrate that the history of this form provides amazingly rich evidence for a diachronic typology of reciprocal constructions. The introductory Section 2 offers necessary definitions, drawing

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special attention to the importance of evidence from Indo-Aryan for a diachronic typology of reciprocals. Section 3 scrutinizes the main stages of the grammaticalization of the most productive Old Indo-Aryan marker of reciprocity, the reciprocal pronoun *anyo'nya-*. Section 4 offers a brief discussion of the competing reciprocal markers, *paras-para-* and *itaretara-* in late (post-Vedic) Old Indo-Aryan texts. Section 5 gives a brief overview of the reflexes of *anyo'nya-* in Middle Indo-Aryan as well as of similar formations in New Indo-Aryan languages (without offering a detailed analysis of the New Indo-Aryan material). In the concluding Sections 6 and 7 I offer a brief comparison of the grammaticalization scenario attested in Indo-Aryan with the scenario documented (or reconstructed) for the history of some other branches of Indo-European. On the basis of this comparison I will formulate a number of generalizations for a diachronic typology of reciprocal constructions and pronouns – one of the hitherto neglected domains of the typology of valency-changing categories.

2 Preliminary remarks and basic definitions

2.1 Synchronic and diachronic typology of reciprocal constructions: state-of-affairs

The last decade has witnessed a considerable progress in the typological study of reciprocal constructions. Our knowledge of this category is accumulated, above all, in the impressive compendium Nedjalkov et al. 2007, a true encyclopaedia of reciprocals, as well as in a number of important studies, such as König and Gast 2008 and Evans 2011. Yet, there is a regrettable imbalance between synchronic and diachronic typological research in the field. On the one hand, we know a lot about the morphological, syntactic and semantic **synchronic** properties of reciprocal constructions; the above-listed studies conveniently summarize the most important features of reciprocals and offer a plethora of generalizations on this linguistic category. On the other hand, a systematic treatment of this category from a **diachronic** perspective is lacking: their rise, development and decline mostly remain on the periphery of typological research.

This being the state of affairs, it seems advisable to initiate a diachronic typological study by collecting evidence from languages (language groups) with a history well-documented in texts for a sufficiently long period of time (around 1000 years or more). When approaching the history of a particular voice and valency-changing category, such as reciprocal, passive or causative, it might be useful to outline some kind of **group (family) portrait** of the relevant category, tracing it

from the earliest attested texts in an ancient language (L_0) onwards up to its reflexes in the daughter languages (L_1 , L_2 etc.). Of particular interest would also be – if available – evidence from the sister languages of L_0 (L' , L'' etc.), which can serve as a basis for a tentative reconstruction of the hypothetical history and possible sources of the category under study in the proto-language $*L$, as shown in Fig. 1:

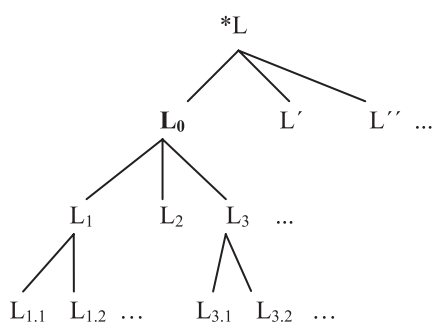


Fig. 1: Language family tree: L_0 with its sister and daughter languages

The Indo-Aryan group of the Indo-European language family is an almost ideal candidate for such a diachronic typological study of several linguistic categories, including reciprocal constructions.

For this branch, we have at our disposal an uninterrupted documented history for a period of more than 3,000 years, starting with Old Indo-Aryan (OIA), which can be roughly identified with (Vedic) Sanskrit.¹ Already by the middle Vedic period (i.e. by the middle of the first millennium B.C.), Sanskrit was no longer a spoken language, but co-existed, as a sacral language, with Middle Indo-Aryan vernaculars. Middle Indo-Aryan (MIA), attested from the 2nd half of the first millennium B.C. onwards, includes Pāli, Prakrits and Apabhraṃśa (for details, see Hinüber 1986/2001). New Indo-Aryan (NIA), which covers the second millennium A.D., is represented by the modern Indic languages such as Hindi-Urdu, Bengali, Marathi, Sinhalese, etc.).

¹ The most ancient Vedic text, the Ṛgveda, dates to the 2nd half of the second millennium B.C. Vedic can be divided into at least two main periods, the mantra language (= the language of the hymns of the Ṛgveda, Atharvaveda and the mantras of the Yajurveda) and the language of Vedic prose, which includes Brāhmaṇas, Āraṇyakas, as well as the earliest Upaniṣads and Sūtras. For the chronology of Vedic texts, see Witzel 1995: 95–98.

This means that, in the case of Indo-Aryan, we possess rich material for a diachronic analysis of the valency-changing categories. On the one hand, the rich evidence collected by Indo-European comparative linguistics creates a good basis for hypotheses about the origin and possible sources of the morphological and syntactic categories attested in OIA and thus provides important material for a **retrospective** diachronic typological research. On the other hand, evidence from late Vedic and Middle Indo-Aryan texts as well as from New Indo-Aryan languages allows for a **prospective** diachronic study (how the OIA categories develop into their reflexes in Middle and New Indo-Aryan).

In what follows, I will attempt to outline such a group portrait of the Indo-Aryan branch in the domain of reciprocal pronouns and reciprocal constructions, offering a preliminary analysis of the evolution of the Indo-Aryan iterated, or polyptotic, reciprocal pronouns, in a diachronic typological perspective, concentrating above all on the initial status of its evolution as documented in Old Indo-Aryan.

2.2 Basic definitions

The term ‘**reciprocal**’ is based on the notion of ‘reciprocal situation’, which suggests two or more participants, typically being in symmetrical relations to each other.² Accordingly, (verbal) forms and constructions that refer to such situations are termed ‘reciprocal forms’ and ‘reciprocal constructions’. I will use the term ‘canonical reciprocal’ for the verbs and constructions with reciprocal relations between the participants expressed by the subject and direct object (*to love each other*, *to hit each other*).

Extremely rich evidence for a diachronic typology and study of the mechanisms of grammaticalization of reciprocal pronouns is furnished by Vedic Sanskrit, one of the most ancient attested Indo-European languages and the oldest documented Indo-Aryan language (the most ancient text, Ṛgveda (RV), can approximately be dated to the 2nd half of the second millennium BC). The Vedic reciprocal pronoun (RP) *anyó . . . anyá-* (*anyo-’nya-*, *anyonya-*)³ represents the iteration of

² I essentially follow here the terminology and classification as outlined in Geniušėnė & Nedjalkov 2000; Nedjalkov 2007: 6–16.

³ *anyonya-* results from the sandhi *-as + a-* → *-o-*: *anyas + anya-* → *anyonya-*. *anyo-* is the sandhi form of the singular masculine nominative *anyás* before voiced consonants and *a*; the grave accent on *-ò-* and the loss of the initial *a* of the second constituent of the reciprocal pronoun also result from the sandhi.

the pronominal adjective *anyá-* ‘(an)other’, thus literally meaning ‘another ... another’.

I will hereafter refer to pronouns of the type of Vedic *anyó ... anyá-* (*anyo-’nya-*, *anyonya-*), i.e. pronouns based on the re-iteration of some element (usually an indefinite pronoun meaning ‘one’, ‘(an)other’, or the like), as **polyptotic**.

In the following section I offer a detailed survey of the main stages of the grammaticalization of the Indo-Aryan pronoun *anyonya-*.

3 Grammaticalization of the Old Indo-Aryan *anyonya-*: the main stages

3.1 Early Vedic (the early Ṛgveda)

In the earliest documented period, that is, in the Ṛgveda (RV), reciprocal constructions with *anyó ... anyá-* are still rare; this meaning is more often expressed by other markers: middle endings, the preverbs *ví* and *sám*, and the adverb *mithás*. We find only five attestations of this reciprocal proto-pronoun (quoted under (1)–(2), (5)). *anyó(-)(a)nyá-* is not yet grammaticalized as a single reciprocal pronoun. Its constituent parts are essentially autonomous lexical units, which can be separated by other words. Both parts of the ‘proto-’ or ‘quasi-pronoun’ agree in number and gender with the antecedent noun. The verbal form agrees with the first part of the reciprocal pronoun (RP), and thus appears in the singular, as in (1)–(2):

(1) (RV 7.103.3d–4a)

a. <i>anyó</i>	<i>anyám</i>	<i>úpa vādantam</i>	<i>eti</i>
other:NOM.SG.M	other:ACC.SG.M	calling:ACC.SG.M	go:PRES:3SG.ACT
b. <i>anyó</i>	<i>anyám</i>	<i>ánu gṛbhṇāt,y⁴</i>	<i>enor</i>
other:NOM.SG.M	other:ACC.SG.M	support:PRES:3SG.ACT	they:GEN.DU
‘One (frog) goes to the call of another; one of the two supports another.’			

(2) (RV 3.33.2)

<i>samār-āṇē</i>	<i>ūrmibhiḥ</i>	<i>pínvamāne</i>
unite:PF-PART.MID:NOM.DU.F	waves:INS	swelling:NOM.DU.F

⁴ The subscript shows that, in spite of sandhi, the vowel should be pronounced for metrical reasons.

anyá *vām* *anyām* *áp,y eti*
 other:NOM.SG.F you:GEN.DU other:ACC.SG.F rise:PRES:3SG.ACT
 ‘When you (= the two rivers) have united together, swelling with waves, one of you rises in another.’

The syntactic pattern attested with *anyá*- . . . *anyá*- in early Vedic is schematically represented in (I) (RM1 and RM2 stand for the first and second constituents of the reciprocal pronoun, S – for the noun denoting the group of participants of the reciprocal situation, or reciprocants, i.e. the antecedent of the reciprocal pronoun):

(I) RM1:NOM S:GEN.non-SG RM2:ACC V:SG

Notice that S:GEN.non-SG should not be bracketed, since this argument is virtually obligatory in the construction; the lack of the genitive group in (1a) and (5b) is probably due to the occurrence of the genitive groups in adjacent lines (pādas), i.e. in (1b) and (5a), respectively.

The closely related Old Iranian language, Avestan, has a polyptotic reciprocal expression derived from the cognate Avestan pronoun *aniia* ‘(an)other’ and built on the same model as the early Vedic *anyá*- . . . *anyá*-, *aniio. ainim*. It is interesting to note that the only occurrence of this pronoun attested in Old Avestan, in the Gāthas, as well as one occurrence in Young Avestan, show the same syntactic pattern, with the genitive of the antecedent, cf. (3)–(4):

(3) (Yasna 53.5)

aṣā. *vā.* *aniio.* *ainim.*
 virtue:INS.SG you:GEN.PL other:NOM.SG.M other:ACC.SG.M
vīuuōṇgha-tū
 excel:DESID-3SG.IMPV.ACT
 ‘Strive to excel each other in virtue! . . .’ (lit.: ‘Let each of you strive to excel the other in virtue . . .’)

(4) (Yašt 13.84)

yaēṣqm. *ainiio.* *ainiehe.* *uruuānəm.*
 which:GEN.PL.M other:NOM.SG.M other:GEN.SG.M soul:ACC.SG
aīβi.vaēnaiti
 towards.look:PRES:3SG.ACT
 ‘. . . which look into each other’s soul.’ (lit.: ‘of which one looks into another’s soul’)

Apparently, both the early RV and the early Avesta attest the pattern which is likely to reflect the Proto-Indo-Iranian situation and thus may be very close to what we tentatively reconstruct for the Proto-Indo-European language (see Sections 6–7).

The only RVic instance of a **plural** verbal form constructed with the reciprocal *anyá-* *anyá-* is attested in the late book 10 of the RV, cf. (5b); note that this pattern appears adjacent to a reciprocal construction with a **singular** form in (5a):

(5) (RV 10.97.14ab)

- a. *anyā́* *vo* *anyām* *avatu*
 other:NOM.SG.F you:GEN.PL other:ACC.SG.F help:PRES:3**SG**.IMPV.ACT
- b. *anyā́* ∪⁵ *anyāsyā* *úpāvata*
 other:NOM.SG.F other:DAT.SG.F stand.by:PRES:2**PL**.IMPV.ACT
- ‘Let one of you (medical plants) help another; stand one by another.’

3.2 Late early Vedic: later books of the Ṛgveda, Atharvaveda

Example (5) shows that at the end of the early Vedic period, that is, in the late Ṛgveda and in the Atharvaveda, pattern (I) cedes to structure (II), with the verb in the non-singular (plural or dual) form:

(II) S:NOM.non-SG RM1:NOM (...) RM2:ACC V:non-SG

Cf. examples (6)–(7) from the AV:

(6) (AVŚ 3.30.1cd)

- anyó* *anyām* *abhi haryata*
 other:NOM.SG.M other:ACC.SG.M love:PRES:2**PL**.IMPV.ACT
- vatsám* *jātām* *iva* ∪ *aghnīyā́*
 calf:ACC.SG born:ACC.SG.M like cow:NOM.SG
- ‘Love each other, like a cow its new-born calf.’

(7) (AVŚ 12.3.50a)

- sám* *agnáyo* *vid-ur* *anyó* *anyām*
 together fire:NOM.PL know:PF-3**PL**.ACT other:NOM.SG.M other:ACC.SG.M
- ‘The fires know each other.’

5 The sign ∪ shows that sandhi is undone.

Reciprocal constructions with the singular verbal forms virtually disappear after the RV, although a few rare examples of pattern (I) can still be found in early middle Vedic (that is, in the prose of the Yajurveda), cf. example (8) from one of the earliest Vedic prose texts, the Taittiriya-Saṃhitā:

(8) (TS 6.2.2.1–2)

<i>tābhyaḥ</i>	<i>sá</i>	<i>nír̥cchād,</i>	
that:DAT/ABL.PL.F	that:NOM.SG.M	be.deprived:PRES:3SG.SUBJ.ACT	
<i>yáḥ</i>	<i>naḥ</i>	<i>prathamò</i>	<i>'nyò</i>
who:NOM.SG.M	we:GEN.PL	first:NOM.SG.M	other:NOM.SG.M
<i>'nyāsmāi</i>	<i>drúhyāt</i>		
other:DAT.SG.M	be.deceitful:PRES:3SG.SUBJ.ACT		

‘The one who first among us will be deceitful (one) to another, will be deprived of these [bodies].’

The constituent parts of the RP normally occur adjacent to one another as in (6)–(8) and (10), but they can also be separated by other word(s), as in (9). The singular form of RM1 and RM2 is not yet completely generalized: in the language of the second most ancient Vedic text, the Atharvaveda (c. 1000 B.C.), we find (relatively rare) examples such as (9)–(10), where both parts of the RP *anyó* . . . *anyá*- appear in the plural:

(9) (AVP 5.10.7c)

<i>hatāso</i>	<i>anye</i>	<i>yodhayant_iy</i>
hit:PART.PF.PASS:NOM.PL.M	other:NOM.PL.M	fight:CAUS:3PL.ACT

**anyāṃs*⁶
other:ACC.PL.M
‘Those which are hit incite one another to fighting.’ (lit. ‘make fight one another’; said of alcohol-drinkers)

In the AV we even come across constituent parts of the reciprocal pronoun in the feminine plural form:

(10) (AVP 17.14.4)

<i>śīrṣāṇ_iy</i>	<i>anyā</i>	<i>anyāsām</i>
head:NOM-ACC.PL	other:NOM.PL.F	other:GEN.PL.F

⁶ The plus sign in the superscript (+) shows that this form is not attested in the manuscripts, but is based on a conjecture; the manuscripts read *anyās* (see Lubotsky 2002: 61–62).

vitāvantīr *iva . . .*
crush(?):ACT.PART:NOM.PL.F like
'Crushing each other's heads, as it were . . .'
(a magic spell against female demonic creatures)

3.3 Middle and late Vedic: the main processes observed in Vedic prose

In the language of the Vedic prose (that is, in the Brāhmaṇas, Āraṇyakas and Upaniṣads), we observe the following stage of the fossilization of the RP, where the structure of the reciprocal construction can be schematized as in (III):

(III) S:NOM.non-SG RM1:NOM-RM2:ACC/DAT/... V:non-SG

A number of features clearly testify to the further grammaticalization of *anyò'nyá*-.

3.3.1 Inseparability

The constituents of the reciprocal pronoun *anyò'nyá-* are no longer found to be separated by other words, as in (9), cf. (11–21):

(11) (KB 13.9 [ed. Sarma 13.741])

na_U **anyo-nyam** *anuprapadyete*
not other:NOM.SG.M-other:ACC.SG.M follow:PRES:3DU.MID
adhvaryū
adhvaryu:NOM.DU
'The (two) adhvaryu-priests do not follow one another.'

(12) (TĀ 1.6.3)

naṁ evaṃ-viduṣācāryāntevāsinau |
not thus-knowing.teacher.pupil:NOM.DU
anyo-nyasmai *druhyātām*
other:NOM.SG.M-other:DAT.SG.M be.deceitful:PRES:3DU.OPT.MID
‘The teacher and the pupil, knowing thus, should not be deceitful to each other.’

3.3.2 Accentuation

In most accentuated middle Vedic texts (Taittirīya-Saṃhitā, Maitrāyaṇī Saṃhitā, Śatapatha-Brāhmaṇa), both parts of the RP bear accents: *anyò-(a)nyá-* (see Wackernagel 1905: 322–323), as, for instance, in (13)–(15):

(13) (TS 7.2.8.6)

chándāṃsy anyò-nyásya lokám
 metre:NOM.PL other:NOM.SG.M-other:GEN.SG.M/N place:ACC
abhy adhyāyan
 be.eager:IMPF:3PL.ACT
 ‘The (poetic) meters were eager for the places of each other.’

(14) (ŚB 14.4.3.30 = BĀUK 1.5.23)

tāni sṛṣṭāny anyò-nyéna aspardhanta
 these created other:NOM.SG.M-other:INS.SG.M/N compete:IMPF:3PL.MID
 ‘These created (active functions) competed with each other.’

(15) (ŚB 5.1.1.2)

átho devāḥ | anyò-nyásminn evá
 then god:NOM.PL other:NOM.SG.M-other:LOC.SG.M PTCL
júhvataś ceruḥ
 pour:PRES:PART.ACT:NOM.PL.M go.ON:PF:3PL.ACT
 ‘Then the gods went on pouring oblations unto each other.’

However, we also find an example of a single accent (on RM1), attested in the Taittirīya-Brāhmaṇa, cf. (16) (see Debrunner 1957: 89):

(16) (TB 1.3.2.1)

té anyò-nyasmai ná atiṣṭhanta
 that:NOM.PL.M other:NOM.SG.M-other:DAT.SG.M not stand:IMPF:3PL.MID
 ‘They (the gods) did not adhere to each other.’

Unfortunately, this is the only example of *anyò-nya-*, found in the TB, so that we cannot be sure whether this was a feature of the dialect of the TB (which is not impossible *per se*) or just a minor lapsus of the scribe.

3.3.3 Agreement properties of the constituents of the RP

The most instructive evidence for the history of the grammaticalization of the reciprocal marker is furnished by the history of the **agreement properties** of the constituents of the reciprocal pronoun.

(i) **Number agreement**

The reciprocal pronoun generalizes the singular form for both of its parts, so that examples such as (9)–(10) above are no longer possible.

(ii) **Gender agreement**

The gender agreement of the constituent parts of the RP follows one of two patterns, (IIIa) and (IIIb):

(IIIa) S:NOM.non-SG RM1:NOM.**M/F**.SG-RM2:ACC/DAT/... **M/F**.SG V:non-SG

i.e. *anyā*-[M/F]-*anyā*-[M/F]

(IIIb) S:NOM.non-SG RM1:NOM.**M**.SG-RM2:ACC/DAT/... **M/F**.SG V:non-SG

i.e. *anyō*-[M]-*anyā*-[M/N/F]

According to the pattern schematized in (IIIa), both constituents of the RP agree in gender with the antecedent. This pattern is attested only in very few texts, in particular, in the relatively late Jaiminiya-Brāhmaṇa. Cf. (17), where both RM1 (*anyā*) and RM2 (*anyāsyai*) agree in gender with the demonstrative pronoun *etā[s]* ‘these, they (fem.)’:

(17) (JB 3.280:2–3)

abhi vā etā anyānyāsyai (= *anyā-anyāsyai*)
 to PTCL this:NOM.PL.F other:NOM.SG.F-other:DAT.SG.F
lokaṃ dhyāyanti
 world:ACC.SG reflect:PRES:3PL.ACT
 ‘They (fem.) reflect about the world of each other.’

Likewise, in (18) the feminine substantive *prajā[s]* ‘creatures’ triggers the feminine gender on both RM1 (*anyā*) and RM2 (*anyām*)

(18) (JB 1.117:1–2)

prajāpatiḥ prajā asṛjata... tā
 P.:NOM.SG creature:ACC.PL create:IMPF:3SG.MID that:NOM.PL.F
aśanāyantīr anyā-nyām ādan
 being.hungry:NOM.PL.F other:NOM.SG.F-other:ACC.SG.F eat:IMPF:3PL.ACT
 ‘Prajapati created the creatures... Being hungry, they ate each other.’

Most texts generalized the masculine form of the first constituent of the RP (*anyo-*) and thus follow the other agreement pattern, schematized in (IIIb). Thus, example (19) from the Pañcaviṃśa-Brāhmaṇa (a text closely related to the Jaiminiya-Brāhmaṇa), corresponding to (18), instantiates such a ‘reduced’ agreement: the feminine gender is only marked on the second constituent of the

reciprocal pronoun, whereas the first component is in the masculine (*anyo-*, not ****anyā-**):

(19) (PB 24.11.2)

prajāpatiḥ prajā asṛjata. tā
 P.:NOM.SG creature:ACC.PL create:IMPF:3SG.MID that:NOM.PL.F
a-vidhṛtā a-sañjānānā
 not-kept.apart:NOM.SG.F not-agree:PART.PRES.MID:NOM.SG.F
anyo-nyām ādan
 other:NOM.SG.M-other:ACC.SG.F eat:IMPF:3PL.ACT
 ‘Prajāpati created the creatures. They, not being kept apart, not agreeing
 (with each other), ate each other.’

Likewise, in (20) we find RM1 in the masculine form (***anyò-nyāsyā[s]***) instead of the feminine (*****anyānyāsyās*** [= ***anyā-nyāsyās***):

(20) (ŚB 5.3.4.21)

tā yāt syāndanta iva ∪
 that:NOM.PL.F when flow:PRES:3PL.MID like
anyò-nyāsyā evā ∪ *etāc chriyā*
 other:NOM.SG.M-other:GEN.SG.F PTCL thus superiority:DAT.SG
ā-tiṣṭha-māṇā uttarādhara īva
 not-stand:PRES-PART.MID:NOM.PL.F higher.lower:NOM.PL.F like
bhāvantyō yanti
 become:PRES:PART.ACT:NOM.PL.F go:PRES:3PL.ACT
 ‘When these [particles of light] are kind of flowing, thus not yielding to one
 another’s superiority, [they] keep becoming now higher now lower.’

Furthermore, no text attests the neuter form *anyād* (distinct from the masculine only in the nominative and accusative, however) for either the first or the second constituent of the RP; that is, neither *****anyad-anyad***, nor *****anyo-nyad*** occur in texts.⁷ Cf. (21), where the masculine form of the RM1 (***anyò-nyāsyā***) is used for neuter (*****anyād-anyāsyā***) according to this pattern:

⁷ The form of the RP with at least one part in the neuter (*anyad*) may never have been in use, perhaps in order to avoid the homonymy with the *amreḍita* (i.e. iterative or distributive) compound *anyād-anyad* ‘one after another; each [into] another’ (see, in particular, Klein 2003: 784 for a detailed discussion of the distributive meaning of *anyād-anyad* in RV 2.24.5).

(21) (TS 7.2.8.6)

chāndāmsy ***anyò-nyásya*** *lokām*
 metre:NOM.PL [N.] other:NOM.SG.M-other:GEN.SG.M/N place:ACC.SG
abhy ādhyāyan
 be.eager:IMPF:3PL.ACT
 ‘The (poetic) metres were eager for each other’s place.’

3.4 Further grammaticalization of *anyo’nya-* in late Vedic and post-Vedic Sanskrit

In late Vedic and post-Vedic Sanskrit the process of grammaticalization of *anyo’nya-* essentially comes to its end. A number of phenomena clearly show that its constituent parts lose the last features of independent forms, and the RP becomes completely fossilized as a single lexical unit.

3.4.1 Agreement properties of the constituents of the RP

Neither part of the RP agrees in gender or number with the antecedent, generalizing the masculine singular form (nominative *anyo-*, accusative *anyam*, etc.), in accordance with the following pattern:

(IV) S:NOM.non-SG RM1:NOM.SG.M-RM2:ACC/GEN/. . . SG.M V:non-SG

Cf. (22), with the masculine form of the RM1 (***anyo-nyam***) used for the feminine (***anyānyam* [= *anyā-anyam*]):

(22) (Rām. 2.53.10)

anyo-nyam *abhivikṣante* [. . .]
 other:NOM.SG.M-other:ACC.SG.M look.at:PRES:3PL.MID
ārtatarāḥ *striyaḥ*
 confused:NOM.PL.F woman:NOM.PL
 ‘The confused women look at each other.’

3.4.2 Constructions with non-subject antecedents

anyo’nya- can be used with non-subject antecedents, in particular, in object-oriented reciprocal constructions. Thus, in (23), RM2 receives the locative case as

the oblique argument of the verb *juhomi* ‘(I) pour into’, but RM1 is in the nominative form (*anyò-*), not in the accusative (***anyám*), thus not agreeing in case with its accusative antecedent *gharmáu* ‘oblations’:

(23) (ŚB 11.6.2.2)

gharmāv *evá* [...] *anyò-’nyásmín*
 gharma:ACC.DU PTCL other:NOM.SG.M-other:LOC.SG.M
juhomi
 pour:PRES:1SG.ACT
 ‘I pour both gharma-oblations, one into another.’

3.4.3 Adverbial usages

In the post-Vedic period (in particular, in Epic Sanskrit), we also find the fossilized (adverbial) form *anyonyam* employed in constructions where the grammatical case of the second constituent of the RP (i.e. accusative) does not correspond to the case pattern of the verb. For instance, in (24) we might expect the instrumental case of the second constituent of the reciprocal pronoun (***anyasyānyena* [*anyasya-anyena*]), in accordance with the case frame of the verb *saṃ-bhāṣ* ‘converse’:

(24) (Rām. 5.89.52)

teṣāṃ *saṃbhāṣa-māṇānām*
 that:GEN.PL.M converse:PRES-PART.MID:GEN.PL
anyo-nyam . . .
 other:NOM.SG.M-other:ACC.SG.M
 ‘. . . of them, conversing with each other . . .’

3.4.4 Compounds with *anyonya-*

Yet another phenomenon which points to the further grammaticalization of *anyonya-* is the rise of compounds of the type *anyonya-X*, meaning ‘mutual, reciprocal X’.

The earliest and the only Vedic example of a compound built with *anyonya-* (noticed in Debrunner 1957 [*Nachtr. zu AiG II/1*]: 89) is the form *anyonya-śreṣṭhyāya* ‘(to) one another’s superiority’ found in the relatively young *Samhitā* of the Black Yajurveda, *Kapiṣṭhala-Kaṭha-Samhitā*:

(25) (KpS 38.2:206.1)

devā vā 'nyo-'nya-śraiṣṭhyāya na
 god:NOM.PL PTCL other:NOM.SG.M-other-priority:DAT.SG not
atiṣṭhanta
 stand:IMPF:3PL.MID
 'The gods were not in a state to [accept] one another's priority.'

The parallel passages in other Saṃhitas of the YV (TS 6.2.2.1, KS 24.9:100.3, MS 3.7.10:90.1) have reciprocal constructions with genitive (*anyònyāsyā*) or dative (*anyònyāsmāi*) instead, as in (26):

(26) (TS 6.2.2.1)

devāsurāḥ sāmyattā āsan.
 god.asura:NOM.PL engaged.in.conflict:NOM.PL.M be:IMPF:3PL.ACT
té devā mithó vipriyā
 that:NOM.PL.M god:NOM.PL mutually unpleasant:NOM.PL.M
āsan. tè 'nyò 'nyāsmāi
 be:IMPF:3PL.ACT that:NOM.PL.M other:NOM.SG.M other:DAT.SG.M
jyāiṣṭhyāya á-tiṣṭhamānāḥ pañcadhā
 priority:DAT.SG not-stand:PRES:PART.MID:NOM.PL.M in.five
vy àkrāman
 separate:IMPF:3PL.ACT
 'The gods and the Asuras were engaged in conflict. The gods were mutually unpleasant (i.e. they disliked each other). Not being in a state to [accept] one another's priority, they separated into five [groups].'

In post-Vedic Sanskrit, where the nominal composition is very productive, such compounds with the first member *anyonya-* become quite common, cf. (27–29):

(27) (Manu-Smṛti 3.32)

anyonya-yogaḥ kanyāyās ca arasya ca
 one.another-union:NOM.SG girl:GEN.SG and lover:GEN.SG and
 'The mutual union of a girl and (her) lover . . .'

(28) (Prašna-Upaniṣad 5.6)

tisro mātṛā mṛtyumatyaḥ prayuktā
 three:NOM.F element:NOM.PL deadly:NOM.PL.F employed:NOM.PL.F
anyonya-sak-tā an-a-viprayuktā
 one.another-connect-PART.PF.PASS:NOM.PL.F not-not-separated:NOM.PL.F

4 Other polyptotic reciprocal pronouns in Old Indo-Aryan: *itaretara-* and *paras-para-*

Alongside *anyó (a)nyá-*, there are two other polyptotic reciprocal pronouns with a similar structure (and probably built on its model), *itaretara-* and *paras-para-*. Both are first attested at the end of the Vedic period and, in fact, should be qualified as essentially post-Vedic forms.

4.1 *itaretara-*

The form *itaretara-* is derived from the pronominal adjective *itara-* ‘(an)other’. It appears at the very end of the Vedic period and remains less common than *anyonya-*. Its inner structure is less clear than that of *anyonya-*. It might be based either on the bare stem (*itara-itara-*), or on the nominative singular feminine form (*itarā-itara-*). The only example of the first component in the masculine form (and one of the earliest attestations of this reciprocal pronoun) is found in a late Vedic text, *Bṛhad-Āraṇyaka-Upaniṣad*. This construction clearly dates to the epoch when the grammaticalization of *itaretara-* had just started; notice also the singular form of the verb (cf. stage I of the grammaticalization process of *anyonya-* discussed above):

(30) (ŚB 14.5.4.15 = BĀUK 2.4.15)

<i>yātra</i>	<i>hí</i>	<i>dvaitām</i>	<i>iva</i>	<i>bhāvati</i> ,	<i>tād</i>
where	since	duality:NOM.SG	as	become:PRES:3SG.ACT	then
<i>itara</i>		<i>itaram</i>		<i>paśyati</i>	
other:NOM.SG.M		other:ACC.SG.M		see:PRES:3SG.ACT	
‘Wherever is duality, there one sees another.’					

Example (31) from the post-Vedic text *Bṛhad-Devatā* is of special interest, being the only attestation of the dual form of the pronoun, which has no parallels in the syntax of reciprocal pronouns in Sanskrit:

(31) (BṛhDev. 7.153)

<i>ākhyānam</i>	<i>itaretarayor</i>	<i>idam</i>
story:ACC.SG	one.another:GEN/LOC.DU.M	this:ACC.SG.N
<i>saṁvādaṁ</i>	<i>manyate</i>	<i>yāśkaḥ</i>
dialogue:ACC.SG	consider:PRES:3SG.MID	Yāśka:NOM.SG

‘This story of [relationship/talk to] each other Yāska considers a dialogue ...’ (said of the Ṛgvedic hymn 10.96 “Purūravas and Urvaśi”, which deals with the relationship and dialogue of two personages, a deity and a mortal)

In the Epics, *itaretara-* is much less common than the two other reciprocal pronouns, *anyó-(a)nyá-* and *paras-para-*. It only occurs twice in the Rāmāyaṇa (both attestations in book 6), and a few dozen times in the Mahābhārata. Curiously enough, *itaretara-* is somewhat less rare in book 6 of the Mahābhārata, where the ratio of *anyonya-*, *paraspara-* and *itaretara-* is 69 : 64 : 19, respectively (as against, for instance, 43 : 34 : 3 in book 1 or 57 : 55 : 6 in book 8⁸). Examples are:

(32) (Rām. 6.46.37–38)

- [37] *tāv ubhau vāhinī-mukhyau* ⁹
 that:NOM.DU.M both:NOM.DU.M army-leader:NOM.DU
jātaroṣau tarasvinau sthitau
 enraged:NOM.DU.M violent:NOM.DU.M standing:NOM.DU.M
kṣataja-digdhāṅgau ' *prabhinnāv iva*
 blood-smeared.member:NOM.DU.M in.rut:NOM.DU.M like
kuñjarau
 elephant:NOM.DU.M
- [38] *ullikhantau su-tikṣṇābhir* ' *damṣṭrābhir*
 tear:PRES.PART.ACT:NOM.DU.M very-sharp:INS.PL.F tusk:INS.PL
itaretaram
 one.another:ACC.SG

‘Those two generals, enraged, violent, were standing with their members covered with blood, like two elephants in rut, tearing each other with very sharp tusks ...’

(33) (MBh. 1.181.23)

- anyonyam ā-hvayantau tau* '
 one.another:ACC.SG to-call:PRES.PART.ACT:NOM.DU.M that:NOM.DU.M
mattāv iva mahā gajau muṣṭibhir
 in.rut:NOM.DU.M like great:NOM.DU.M elephant:NOM.DU.M fist:INS.PL
jānubhiś caiva ' *nighnantāv itaretaram*
 knee:INS.PL and beat:PRES.PART.ACT:NOM.DU.M one.another:ACC.SG

⁸ Cf. also the ratio 19 : 29 : 2 in Kālidāsa’s works, according to Scharpé’s (1966) *Kālidāsa-Lexicon*.

⁹ The sign ' marks the border between minimal metrical units (pādas).

muhūrtaṃ *tau* *tathā* ∪ ***anyonyam*** '
 in.a.moment that:NOM.DU.M thus one.another:ACC.SG
samare *paryakarṣatām*
 battle:LOC.SG drag:IMPF:3SG.MID

‘Calling to each other, they, like two huge elephants in rut, beating each other with fists and knees, dragged each other about in the battle.’

(34) (MBh. 6.2.4)

te *haniṣyanti* *saṃgrāme* ' *samāsādyā* ∪
 that:NOM.PL.M kill:FUT:3PL.ACT battle:LOC.SG approach:CONV
itaretaram
 one.another:ACC.SG

‘Having approached [each other] in the battle, they will kill each other.’

On the basis of the rare attestations of *itaretara-* in late Vedic and post-Vedic Sanskrit, one may assume that, at least in some texts – in particular, in the Rāmāyaṇa – this pronoun was (almost) exclusively used with dual antecedents, cf. (30)–(33).¹⁰ The opposite is not true, however: we find numerous examples of constructions with the RPs *anyonya-* and *paraspara-* with dual antecedents; see Section 4.3 for details and examples. Note, in particular, that in (33) *anyonya-* and *itaretara-* are used interchangeably in similar contexts, with no difference in meaning.

4.2 *paras-para-*

Like *itaretara-*, the pronoun ***paras-para-*** is a post-Vedic form (one of its earliest occurrences is found in a Śrauta-Sūtra, at Vaikhāṇasa-Śrauta-Sūtra 8.7:84.12, i.e. at the very end of the Vedic period). It represents the iteration of the pronominal adjective *para-* ‘far, other, different, alien, foreign’, as in (35):

(35) (KA 1.13.18)

paras-parād *vā* *bhedayed*
 other:NOM.SG.M-other:ABL.SG.M or split:PRES.CAUS:3SG.OPT.ACT
enān
 he:ACC.PL.M
 ‘... or he should divide them from each other ...’

¹⁰ This does not hold for the Mahābhārata, however: most of the occurrences of *itaretara-* appear in constructions with plural antecedents.

As in the case of the late Vedic and post-Vedic *anyonyam*, the accusative form *paras-param* can be used adverbially, meaning ‘mutually’, as in (36):

(36) (MBh. 1.194.6)

paraspāreṇa *bhedaś* *ca* ' *na* \cup *ādhātum*
 one.another:INS.SG split:NOM.SG and not establish:INF
teṣu *śakyate* | *ekasyām* *ye*
 that:LOC.PL.M be.able:PASS:3SG one:LOC.SG.F who:NOM.PL.M
ratāḥ *patnyām* ' *na* *bhidyante*
 being.in.love:NOM.PL.M wife:LOC.SG not split:PRES:3PL.MID
parasparam
 one.another:ACC.SG(.M)

‘And they cannot be alienated from one another (lit. ‘for them, the split from one another cannot be established’). [Men] who are in love with the same wife are not split from each other.’

4.3 *anyonya-* vs. *paraspara-*

4.3.1 Correlation with the number of antecedent?

Generally, no difference in meaning between reciprocal constructions with *anyonya-* and *paraspara-* can be observed. According to Richter (1898: 49), *paraspara-* is mostly used with two reciprocants; in other words, *paraspara-* is allegedly employed with dual antecedents, while the usage of *anyonya-* is supposed to be limited to the plural antecedents. This formulation is reproduced in standard grammars, in particular, by Wackernagel (1905: 324) and Renou (1930: 380). Yet, evidence from most texts does not support this assumption. In some texts we can only surmise a weak tendency to select the RP in accordance with Richter’s rule. Thus, in the Rāmāyaṇa, approximately 2/3 of the total amount of the occurrences of *anyonya-* are attested in constructions with the antecedent in the plural, as in (37), but constructions with the antecedent in the dual are attested as well, cf. (38–39):

(37) (Rām. 2.77.10)

pariṣvajānāś *ca* \cup *anyonyam* *yayur*
 embracing:NOM.PL.M and one.another:ACC.SG go:PF:3PL.ACT
nāgarikāḥ
 citizen:NOM.PL

‘... and, embracing each other, the men of the city were going ...’

(38) (Rām. 2.83.4)

iti samvadator *evam 'anyo-nyam*
 thus converse:PRES:PART:ACT:GEN/LOC.DU.M thus one.another:ACC.SG
nara-simhayoḥ
 men-lion:GEN/LOC.DU
 'While the two lions among men were conversing thus with each other . . .'

(39) (Rām. 1.10.22)

tāv anyonyāñjaliṃ kṛtvā [. . .] nanandatur
 that:NOM.DU.M one.another.ñjali make:CONV rejoice:PF:3DU.ACT
 'They both (sc. kings Daśaratha and Romapada), having made *añjali* to one another, rejoiced . . .'

In the case of the RP *paraspara-*, Richter's rule seems not to operate at all: constructions with the antecedent in the plural (cf. (41)) and in the dual (cf. (40)) are equally well-attested:

(40) (Rām. 6.75.33)

parasparam tau pravavarṣatur bhṛṣam
 one.another:ACC.SG that:NOM.DU.M shower:PF:3DU.ACT furiously
śaraughavarṣeṇa
 rain.of.arrows:INS.SG
 'They (= Lakṣmaṇa and Indrajit) furiously showered each other with a rain of arrows.'

(41) (Rām. 1.13.14)

prāhuḥ suvāgmino dhīrāḥ
 talk:PF:3PL.ACT most.eloquent:NOM.PL.M wise:NOM.PL.M
paraspara-jigīṣayā
 one.another-defeat:DESID:NOM.ABSTR:INS.SG
 'The most eloquent wise men were talking, trying to defeat one another.'

To sum up, it is virtually impossible to find sufficient evidence for consistent usages of *anyonya-* and *paraspara-* in accordance with Richter's rule.¹¹ It seems that in most texts both RPs could be used interchangeably, with no semantic

¹¹ The source of this ghost rule is unclear. Perhaps it was inspired by the deceptive parallelism with the situation in Latin, where we find two polyptotic reciprocal pronouns: *alter alterum* (in the case of two reciprocants) and *alius alium* (for more than two reciprocants); see Section 6.4 below.

difference. It is also very likely that, in metrical texts, the selection of the RP could be mainly conditioned by metrical reasons: the stem *anyonya-* is trisyllabic, while *paraspara-* is quadrisyllabic.¹² Finally, some texts show obvious preference for one of these two forms. Thus, Pañcatantra only attests *paraspara-* (approx. 30 times) and, once, *itaretara-*, while *anyonya-* does not occur in this text.¹³ It is interesting to note that the only attestation of *itaretara-* appears in a verse (adjacent to *paraspara-*) and thus the choice of the reciprocal pronoun is likely to be due to metrical factors:

(42) (Pañcatantra 2.136)

<i>yathā</i>	<i>chāyā-tapau</i>		<i>nityaṃ</i>	'	<i>su-sambaddhau</i>
as	shadow-heat:NOM.DU		always		well-connected:NOM.DU.M
<i>parasparam</i>		<i>evaṃ</i>	<i>karma</i>		<i>ca kartā ca</i>
one.another:ACC.SG		thus	deed:NOM.SG		and doer:NOM.SG and
<i>saṃśliṣṭāv</i>		<i>itaretaram</i>			
attached:NOM.DU.M		one.another:ACC.SG			

'As the shadow and light are always well-connected to one another, so the deed and the doer are closely attached to one another.'

However, as we shall see in the following section, in at least one Classical Sanskrit text *anyonya-* and *paraspara-* are semantically opposed to each other.

4.3.2 *anyonya-* vs. *paraspara-*: a semantic opposition in Kauṭīliya's "Arthaśāstra"

In Kauṭīliya's "Arthaśāstra" (KA), an ancient Indian treatise on statecraft, economic policy and military art (written probably at the turn of the Christian era), *anyonya-* and *paraspara-* are neatly opposed to each other in their usage. *paraspara-* is used with hostile, inimical activities with negative consequences (this type of the reciprocal situation will hereafter be referred to as 'negative'), while *anyonya-* is employed in contexts of friendly or neutral activities.¹⁴ Cf. a few examples of constructions and compounds with *anyonya-* and *paraspara-* that clearly illustrate this semantic opposition:

¹² The rarer *itaretara-* with its quintisyllabic stem may offer yet another metrical option.

¹³ Counts from the electronic edition based on ed. by Ramchandra Jha (available at http://www.sub.uni-goettingen.de/ebene_1/fiindolo/gretil/1_sanskr/5_poetry/4_narr/vispancu.htm).

¹⁴ For a detailed discussion of evidence from this text, see Kulikov (forthc).

- constructions with *anyonya-*:

(43) (KA 1.12.12)

na caṣ anyonyaṃ saṃsthās te vā
 not and one.another:ACC.SG group:NOM.PL that:NOM.PL.M PTCL
vidyuh
 know:PRES:3PL.OPT.ACT
 ‘And those groups should not know each other.’

(44) (KA 2.36.6)

kāru-śilpinaḥ sva-karma-sthāneṣu sva-janaṃ
 artisan-artist:NOM.PL own-work-place:LOC.PL own-people:ACC.SG
vāsayeyuh, *vaidehakāś caṣ*
 dwell:PRES.CAUS:3PL.OPT.ACT merchant:NOM.PL and
anyonyaṃ sva-karma-sthāneṣu
 one.another:ACC.SG own-work-place:LOC.PL
 ‘Artisans and artists should lodge their colleagues in places of their activity,
 and the merchants [should lodge] each other in places of their activity.’

- constructions with *paraspara-*:

(45) (KA 3.16.33)

āśramaṇaḥ pāṣaṇḍā vā mahaty avakāśe
 hermit:NOM.PL pāṣaṇḍa:NOM.PL or great:LOC.SG.M space:LOC.SG
parasparam a-bādhmānā
 one.another:ACC.SG not-disturb:PRES:PART.MID:NOM.PL.M
vaseyuh
 dwell:PRES:3PL.OPT.ACT
 ‘Hermits or pāṣaṇḍas (= non-brahmanic hermits) should settle on a vast
 space, without disturbing each other.’

(46) (KA 1.13.18)

parasparād vā bhedayed enān . . .
 one.another:ABL.SG or divide:PRES.CAUS:3SG.OPT.ACT he:ACC.PL.M
 ‘Or he should divide them from each other . . .’

(47) (KA 5.6.25)

amātyaḥ kulya-kumāra-mukhyān
 minister family.member-prince-principal.officer:ACC.PL
parasparam mukhyeṣu vā
 one.another:ACC.SG principal.officer:LOC.PL or
vikramayet
 quarrel:PRES.CAUS:3SG.OPT.ACT

‘The minister should make members of the (royal) family, princes and principal officers quarrel with each other.’

The same rule of the selection of the reciprocal pronoun operates in compounds with *anyonya-* and *paraspara-*. Cf.:

- compounds with *anyonya-*:

trivargam anyonyānubandham (KA 1.74) ‘the threefold goal of life, (the components of which are) bound with one another’,

anyonyārakṣa- (KA 2.1.2) ‘mutual protection’,

anyonyopakāra- (KA 3.3.30) ‘rendering services to one another’

- compounds with *paraspara-*:

parasparābhīyoga- (KA 3.11.33) ‘mutual accusation’,

paraspara-dveṣa- (KA 9.6.26) ‘mutual hatred’,

paraspara-hiṃsā- (KA 3.9.28) ‘mutual damage’.

It cannot be ruled out that some other late Sanskrit texts contemporary to Kauṭīliya could make a similar distinction between the usages of *anyonya-* and *paraspara-*, but, so far, I have been unable to come across the opposition between *anyonya-* and *paraspara-* in other Sanskrit texts.

From a linguistic or typological point of view, the semantic opposition ‘inimical’ ~ ‘non-inimical’ (negative ~ neutral) is unique: it seems not to occur in other languages of the world. At any rate, it is not attested in the ample language sample of the fundamental five volume encyclopaedia of reciprocal constructions (Nedjalkov et al. 2007). In the case of the variety of Sanskrit attested in the Arthaśāstra, we may be confronted with an invention of Kauṭīliya, the author of the text, probably based on the semantic difference between *anyā-* ‘(an)other’ and *para-* ‘other, foreign, alien’.

5 Polyptotic reciprocal pronouns in Middle and New Indo-Aryan languages

5.1 Middle Indic reflexes of the OIA reciprocal pronouns

The Old Indo-Aryan reciprocal pronoun is further continued by its reflexes in Middle Indo-Aryan (MIA). Thus in Pāli we find the reciprocal pronoun based on

the iteration of the Pāli word for ‘another’, *añña-* (< OIA *anyā-*). From the syntactic point of view, MIA constructions are essentially similar (or, to be more exact, isomorphic) to the late Sanskrit constructions with *anyo’nya-* (cf. (IV)): the first constituent part of the reciprocal pronoun (RM1) is fossilized in one particular form, while the second part (RM2) takes different case forms of the singular paradigm, depending on the syntactic construction; and the verbal form agrees in number with the non-singular antecedent. Constructions with the verb in the singular form (of the type *one loves another*) are not infrequent either, cf. (50). The main morphological difference from the OIA pendant is the form of the first constituent (RM1), which is the accusative singular (masculine) *aññam*, instead of the nominative singular masculine in OIA, i.e. the pronoun takes the form *aññam-añña-*, cf.:

(48) Pāli (Jātaka i.254)

dve janā aññam-aññam ghātayimṣu
 two:NOM person:NOM.PL one.another:ACC.SG slay:CAUS:AOR:3PL.ACT
 ‘Two persons slew each other.’

(49) Pāli (Digha Nikāya I.21)

te aññam-aññamhi paduṭṭha-cittā
 that:NOM.PL.M one.another:LOC.SG.M offensive-mind:NOM.PL.M
kilanta-kāyā kilanta-cittā
 exhausted-body:NOM.PL.M exhausted-mind:NOM.PL.M
 ‘They, who are offensive-minded against each other, become physically exhausted [and] mentally exhausted.’ (cf. Jantrasrisalai 2008: 199 for a discussion of this passage)

(50) Pāli (Suttanipāta 148)

na paro param nikubbetha [...] na aññam-aññassa dukkhaṃ iccheyya
 not another:NOM.SG.M another:ACC.SG humiliate:2SG.OPT.MID not
 one.another:GEN.SG.M evil:NOM.SG wish:3SG.OPT.ACT
 ‘You should not humiliate one another [...] May one not wish evil to each other (lit. each other’s evil).’

(51) Pāli (Vinaya-Piṭaka II.162)

te aññam-aññam sa-gāravā
 that:NOM.PL.M one.another:ACC.SG with-respectful:NOM.PL.M
sappatissā . . . sabhāga-vuttikā viharitvā
 obedient:NOM.PL.M common-living:NOM.PL.M dwell:CONV
 ‘Having been respectful, obedient, and having lived in harmony toward each other . . .’

Similar forms are found in a number of early Prakrits – for instance, in the genitive form of the reciprocal pronoun attested in an Aśokan Prakrit (Gir.) *aññam-aññasa* ‘of one another’. This Middle Indic formation is also calqued into the Buddhist Hybrid Sanskrit form *añyam-añya* (Mahāvastu ii.436).

The only alleged occurrence of the form *añño añña*- mentioned in the Pāli-English dictionary of the Pali Text Society (Rhys Davids and Stede 1921–1925: 13), with RM1 in the nominative and thus directly corresponding to the OIA *anyo’nya*-, appears in a reciprocal context, quite in accordance with its characterization in the dictionary, but instantiates a free collocation of the indefinite pronoun, rather than a single lexical unit, i.e., it is not a grammaticalized reciprocal pronoun in this example:

(52) Pāli (Dhammapada 165)

suddhī *asuddhī* *paccattaṃ* *na* *añño*
 purity:NOM.SG impurity:NOM.SG separately not another:NOM.SG.M
aññaṃ *visodhaye*
 another:ACC.SG purify:PRES:3SG.OPT.ACT
 ‘Purity and impurity depend on oneself (lit. are separately). One cannot purify another.’

Alongside very few (one or two) isolated attestations of reciprocal *añño añña*- (e.g. Ap 33 *aññoññaṃ byākaronti* ‘they explain to each other’) that may instantiate rare direct continuations of the original OIA form *anyo’nya*- (perhaps a secondary replacement under the influence of the Sanskrit form?), the direct reflex of OIA *anyo’nya*- is only found in Pāli as the first member of a few compounds, such as *aññoñña-nissita*- (cf. (53)) or *aññoñña-bhinna*- ‘not agreeing with one another’ (Dāṭṭhavaṃsa v.45).

(53) Pāli (Jātaka v.251 = Catukkanipāto 107)

sāgārā *an-agārā* *ca*, *ubho*
 with.house:NOM.PL.M not-house:NOM.PL.M and both
aññoñña-nissitā
 one.another-independent:NOM.PL.M
 ‘Living in a house and homeless, both are independent from each other.’

More archaic are some other Prakrits, where we find such forms of the reciprocal pronoun as *aṇṇōṇṇa*- (in Māhārāṣṭrī, Ardhamāgadhi, Jaina-Māhārāṣṭrī and Śaurasenī) or *aṇṇuṇṇa*- (Māhārāṣṭrī); see Pischel 1900: 73–74.

Very rare are the reflexes of another OIA reciprocal pronoun, *paraspara*- (quite remarkably, with the preservation of the original morphological structure,

that is with the RM1 in the nominative). The only attestation registered in the Pāli-English dictionary of the Pali Text Society (Rhys Davids and Stede 1921–1925: 418) is *paro para-* found in Sn 148 and quoted under (50).

5.2 Reciprocal pronouns in New Indo-Aryan (NIA)

The Middle Indic *aṇṇaṇṇa-* etc. find their continuation in a few NIA languages, in particular, in Sindhi *unun* ‘mutually’ (see, in particular, Turner 1962–1966: 19). However, in some other NIA languages, the reflexes of the OIA *anyo’nya-* have been replaced by the polyptotic pronoun based on another pronominal stem, OIA *eka-* ‘one’, built on the same model as Pāli *aññam-añña-* – that is, with the RM1 fossilized in the accusative form in *-m*. This is the case, for instance, with Gujarati *ekmek* (see Mistry 2000: 241) and Marathi *ekamek* (see Wali 2000: 518), as in the following Marathi example:

(54) Marathi (Dhonde and Wali 2009: 269)

<i>ya</i>	<i>mulī</i>	<i>ekamek-a</i>	<i>wiruddhā</i>	<i>cuglya</i>	<i>sang-t-at</i>
those	girls	each.other-OBL	against	complain	tell-IMP-FPL

‘Those girls complain against each other.’

It is interesting to note that this typologically rather unusual morphological model with the accusative of the first constituent of the reciprocal pronoun has parallels in Dravidian languages, where we also find polyptotic formations with the accusative marking of the first constituent, as demonstrated in Subbarao and Saxena 1987: 128–134. Cf. a few illustrative examples quoted in that paper:

(55) Telugu

<i>wāḷḷu</i>	<i>okaḷḷa</i>	<i>ni</i>	<i>okaḷḷu</i>	<i>koṭṭu-konn-āru</i>
they	someone	ACC	someone	hit-RECP-AUX

‘They hit each other.’

(56) Kannada

<i>avaru</i>	<i>obbar-anna</i>	<i>obbaru</i>	<i>hoḍedaru</i>
they	someone-ACC	someone	hit:PAST

‘They hit each other.’

This parallelism may point to a possible source of the innovative morphological model with RM1 in the accusative that emerges in Indo-Aryan as early as at the beginning of the Middle Indic period (that is, presumably, in the middle of the

first millennium B.C.). It is very likely that the linguistic contacts with Dravidian-speaking groups that had substantially increased by that time could trigger this change in the morphological structure of the polyptotic reciprocal pronoun, or, at least, that it was a shared innovation, common for both (Middle) Indo-Aryan and (Old) Dravidian languages.

6 Polyptotic reciprocal pronouns in other Indo-European languages: Different grammaticalization patterns

To conclude, it will be in order to take a look at the syntactic patterns attested with cognate or functionally parallel reciprocal pronouns in other Indo-European languages, especially in those which preserve the rich Indo-European gender-number-case morphology. Polyptotic reciprocal pronouns of the same type (i.e. pronouns that represent the iteration of the indefinite pronoun meaning ‘another’) are also attested in several other Indo-European languages, cf. Greek ἀλλήλους, Latin *alius alium*, etc. (see Krisch 1999).¹⁵

6.1 Old Iranian: Avestan evidence

For Avestan, in spite of the scarcity of evidence, we can surmise the development starting from the syntactic pattern attested both in early Vedic (in the language of the Ṛgveda) and Old Avestan (cf. (3)) (which, as mentioned in Section 3.1, may tentatively be reconstructed for Proto-Indo-Iranian as well) towards the pattern with the generalized plural form of the 2nd constituent of the reciprocal pronoun, as instantiated in (57):

Diachronic pattern:

(Av.I) Old Avestan S:GEN.non-SG RM1:NOM.SG RM2:ACC.**SG** V:SG (cf. (3–4))

↓

(Av.II) Young Avestan S:NOM.non-SG RM1:NOM RM2:(OBL).**PL** V:non-SG

¹⁵ Similar (but not identical) developments can be observed in the languages with a well-documented history, cf. the grammaticalization of English *each other* and *one another* (which could still be discontinuous in Middle English, cf. *ech help other, oon oof another's clothes*; see Sheen 1988; Raumolin-Brunberg 1997).

(57) Young Avestan (Videvdāt 9.8)

cuuāt. haca. aniiō. aniiaēibiīō
 how.much from other:NOM.SG.M other:ACC.PL.M
 ‘How far from one another [should the holes be dug]?’

6.2 Greek

In Greek, we find a complete paradigm of reciprocal pronouns built on the same model as OIA *anyo’nya-*, but with the first constituent (RM1) fossilized in the stem form (as, for instance, in ἀλλήλους [*allélous*], where *é* results from the merger of two *a*’s: *alla-alo-* < **allo-allo-*)¹⁶ and the second constituent (RM2) agreeing with the antecedent in number (plural or dual, the latter only being possible in the earlier language), case and gender; see, for instance, Revuelta Puigdollers (2012). The paradigm of the reciprocal pronoun in Ancient Greek thus includes a plethora of forms (see, e.g., Mastronarde 2013: 210), such as:

– in the plural:

ACC.PL.M.	ἀλλήλους [<i>allélous</i>]	ACC.PL.F.	ἀλλήλας [<i>allélas</i>]
GEN.PL.M/N/F.	ἀλλήλων [<i>allélōn</i>]		
DAT.PL.M.	ἀλλήλοις [<i>allélois</i>]	DAT.PL.M.	ἀλλήλαις [<i>allélais</i>]

etc.

– in the dual:

ACC.DU.M/N.	ἀλλήλω [<i>allélō</i>]
GEN/DAT.DU.M/N.	ἀλλήλοιν [<i>alléloin</i>]

etc.

Examples (58)–(61) illustrate a few agreement patterns. Notice especially the neuter form of the reciprocal pronoun ἀλλήλα [*allēla*] agreeing with the coordinated masculine (Δήμῳ [*Démōi*]) and feminine (φιλοσοφίᾳ [*philosophíai*]) antecedents in example (58):

¹⁶ See Schwyzler (1939: 446, with fn. 8). Wackernagel (1889: 31–32 = 1955 [*Kl.Schr.* II]: 927–928) saw here the feminine singular or neuter plural forms (**állā-* or **állā-*), but, as Schwyzler (1939: 446, with fn. 8) rightly pointed out, the masculine should be much more common in such formations. The single *l* in the second constituent (instead of **ll*) must be due to a dissimilatory process (“dissimilatorischer Lautverlust”); see Schwyzler (1939: 260) and Beekes (2010: 72).

(58) Koine Greek (Synesius, Letters 105)

Δήμῳ γὰρ δὴ καὶ φιλοσοφία τὶ πρὸς
 Démoī gār dh̄ kaī philosophiāī tì pròs
 people:DAT.SG PTCL PTCL and philosophy:DAT.SG what to
ἄλληλα
 allēla
 other.other:ACC.PL.N
 ‘What can there be in common between the ordinary people and philosophy?’

(59) (Xenophon, Cyropaedia 6.1.47)

ὡς δ’ εἰδέτην **ἀλλήλους** ἡ
 hōs d’ eidētēn allēlous hē
 when PTCL see:AOR:3DU.ACT other.other:ACC.PL.M ART:NOM.SG.F
 γυνή καὶ ὁ Ἀβραδάτας, ἡσπάζοντο
 gunē kaī ho Abradátas, ēspázonto
 wife:NOM.SG and ART:NOM.SG.M Abr.:NOM.SG greet:IMPF:3PL.MID
ἀλλήλους
 allēlous
 other.other:ACC.PL.M
 ‘When Abradatas and his wife saw each other, they embraced each other.’

(60) (Plato, Gorgias 524b)

ὁ θάνατος . . . οὐδὲν ἄλλο ἢ
 ho thánatos . . . oudèn állo è
 ART:NOM.SG.M death:NOM.SG NEG else ART:NOM.SG.F
 δυοῖν πραγμάτοις διάλυσιν, τῆς
 duoîn pragmatóin díalysin, tēs
 two:GEN.DU.M/N thing:GEN.DU.N dissolution:NOM.SG ART:GEN.SG.F
 ψυχῆς καὶ τοῦ σώματος, ἀπ’
 psukhēs kaī toû sómatos, ap’
 soul:GEN.SG and ART:GEN.SG.N body:GEN.SG from
ἀλλήλων.
 alléloin
 other.other:GEN.DU.M/N
 ‘Death . . . is nothing else than the dissolution of two things, the soul and the body, from each other.’

(61) (Iliad 6.226)

ἔγχεα δ’ **ἀλλήλων** ἀλεώμεθα
 égkhea d’ allélōn aleōmetha
 spear:ACC.PL PTCL other.other:GEN.PL.M avoid:PRES:1PL.SUBJ.MID

καὶ δι' ὁμίλου
 kaì di' homíλου
 and in crowd:GEN.SG

'We should flee from the spears of one another even in the mob'.

One may assume that Greek attests the final stage of the prehistoric development, which arrives at the diachronic pattern that can be schematized as follows:

(Gr-II) [*??? →] S:NOM.non-SG RM1[stem]-RM2:ACC/GEN/DAT.DU/PL V:non-SG

6.3 Reciprocal pronoun in Slavic (*drug druga*)

In several Slavic languages, in particular, in Russian, we also find a polyptotic reciprocal pronoun built on the same model as *anyo'nya* – ***drug drug-*** (with the first constituent fossilized in the nominative singular form and the second constituent that can take oblique case form), as in (62)–(63):

(62) Russian

Tanja i Maša ne ljubjat drug drug-a
 Tanja:NOM and Maša:NOM not like:PRES:3PL REC.PR-ACC
 'Tanja and Maša do not like each other.'

(63) Russian

Tanja i Maša podarili drug drug-u ser'gi
 Tanja:NOM and Maša:NOM present:PAST:PL REC.PR-DAT earrings:ACC
 'Tanja and Maša presented earrings to each other.'

This RP is found already in the oldest attested Slavic language, Old Church Slavonic (*drougъ drouga*). This form, erroneously explained by Heine and Kuteva (2002: 92) as the iteration of the Russian word *drug* 'friend, comrade', is based in fact on the short form of the indefinite pronoun *drougъ* 'other, another' (which Modern Russian has only preserved in its full form, *drugoj* = OCS *drougyi*); see, for instance, Vasmer 1953–1958: I, 373, lemma *DRUGOJ* '(an)other' (~ Old Church Slavonic, Old Russian *drougъ*). The structure of this Slavic reciprocal pronoun, 'other:NOM.SG.M/F other:ACC/DAT/. . . SG.M/F', is undoubtedly parallel to similar polyptotic formations of other Indo-European languages, such as Greek ἀλλήλους, Old Indo-Aryan *anyo'nya* etc. (the Old Church Slavonic form could even be a translation calque from the Greek text of the New Testament). Like in Vedic, we observe the gradual grammaticalization of this RP in Slavic. In particular, in the

oldest attested Slavic language, Old Church Slavonic, as well as in Old Russian we still find examples of feminine forms of both RM1 and RM2.

Thus, in example (64) from Codex Suprasliensis (Suprasl'skaja rukopis') the reciprocal expression *drougъ drouga* agrees in gender with the feminine substantive *veštъ* 'thing':

(64) Old Church Slavonic (Codex Suprasl. 59:14)

Дѣвѣма	прѣдѣлежа́штема	вештьма ·	и	
<i>děvěma</i>	<i>prěděležestema</i>	<i>veštъma</i>	<i>i</i>	
two:DAT.F	exist:PART.PRES:DAT.DU.F	thing:DAT.DU (FEM.)	and	
кото́раѣштема	сѧ	има	дроуга	къ
<i>kotorajostema</i>	<i>sę</i>	<i>ima</i>	druga	<i>k</i>
contradict:PART.PRES:DAT.DU.F	REFL	it:DAT.DU.F	other:NOM.SG.F	to
дроузѣ ·	ю́дно	изво́лите ·		
druzě	<i>jedno</i>	<i>izvolite</i>		
other:DAT.SG.F	one:NOM.SG.N	choose:PRES:2PL		
'When two things are present (before you), and they contradict each other [dativus absolutus construction], you choose one.' ¹⁷				

Similar examples with the feminine forms of the constituent parts of the reciprocal pronoun are also found in Old Russian, cf. (66–67)

(65) Old Russian (Uspensky Codex 97g:16–18)

... и	кры́яста	сѧ	дроуга	за
<i>i</i>	<i>kryjasta</i>	<i>sja</i>	druga	<i>za</i>
and	hide:PAST:3DU	REFL	other:NOM.SG.F	behind
дроугоу				
drugu...				
other:ACC.SG.F				
'... and they two (FEM.) were hiding one behind the other.'				

(66) Old Russian (Uspensky Codex 289a:30–32)

... и	щѣ́бѣтаху	сѣ́даще	дроуга	к
<i>i</i>	<i>ščěbьtaxu</i>	<i>sědjašče</i>	druga	<i>k</i>
and	twitter:PAST:3PL	sitting	other:NOM.SG.F	towards

¹⁷ This passage is taken from a hagiographic text, which further continues: either you renounce Christ and rejoice with us, or you do not submit and will be executed with sword.

друзѣ

družě...

other:DAT.SG.F

‘... and they (birds, FEM.) twittered, sitting, one towards the other.’

Later the masculine form has been generalized for both constituents of the reciprocal pronoun.

6.4 Latin

In Latin, we find a few reciprocal pronouns, which include three polyptotic formations: *alter alterum* (for two reciprocants); *alius alium* (for more than two reciprocants); *alter utrum* (in Late Latin); and *uter uterum* (attested only in the earlier language); see, in particular, Fanelli (2009), Bortolussi (2010), and Nkollo (2013), with a detailed overview of further developments in some Romance languages. They can be employed in constructions with the verbal form in the singular (cf. the early Vedic and Old Avestan pattern), as in (67), or in the plural, as in (68):

(67) (Cicero, Rep. 3.23)

<i>alius</i>	<i>alium</i>	<i>timet</i>
other:NOM.SG.M	other:ACC.SG.M	be.afraid:PRES:3SG

‘They are afraid of each other.’

(68) (Sallust, Iug. 3.8) (Bortolussi 2010: 76)

<i>milites</i>	<i>alius</i>	<i>alium</i>	<i>laeti</i>
soldier:NOM.SG	other:NOM.SG.M	other:ACC.SG.M	joyful:NOM.SG.M

appellant
call:PRES:3PL

‘The soldiers joyfully call upon each other.’

Grammaticalization phenomena comparable to what we observe in Vedic, Avestan and Slavic, are attested only for Late Latin *alter utrum*. In particular, *alter utrum* is found in adverbial usages similar to those attested for *anyonyam* and *parasparam* in Sanskrit (examples (24, 36)), as in (69), taken from the Vulgate (a late 4th-century Latin translation of the Bible); see, in particular, Wackernagel 1924: 97–101:

(69) Late Latin (Vulgate, John 13:14)

debetis *alter-utrum* *lavare* *pedes*
 must:PRES:2PL other(:NOM.SG.M)-either:ACC.SG.M wash:INF foot:ACC.PL
 ‘You must wash each other’s feet.’

Notice that, from the formal point of view, *alter-* can be analyzed either as a bare stem or as a nominative singular masculine form.

7 Concluding remarks: Old Indo-Aryan reciprocal pronoun in the context of Proto-Indo-European reconstruction

7.1 The development of the Indo-Aryan reciprocal pronoun within the Indo-European historical context

In the present paper I have demonstrated that Vedic texts attest the gradual grammaticalization of the form *anyó* . . . *anyá-* from a combination of two independent words to one single lexical unit – a polyptotic reciprocal pronoun.

On the basis of evidence from Vedic and other Indo-European languages, we are able to reconstruct some features of the PIE reciprocal constructions. In particular, there are good reasons to restore for PIE the construction with the polyptotic reciprocal form **alīos*¹⁸ . . . *alīom* (masculine) / **alīā* . . . *alīām* (feminine). This collocation was not yet grammaticalized as a single lexical unit in the proto-language (and thus probably cannot be labelled ‘pronoun’): both of its parts agree with the antecedent and can be separated by other word(s). Yet, evidence available from various Indo-European languages reveals the general tendency to grammaticalize this proto-pronoun as early as in the oldest dialects of Proto-Indo-European.

Comparing this reconstructed pattern with evidence available from the sister languages (cf. $L_0 \sim L', L''$ etc. in Fig. 1, Section 2.1), we observe at least three important types of diachronic evolution of the original syntactic pattern reconstructed for Proto-Indo-European, which thus furnishes rich material for a diachronic typology of reciprocal pronouns and reciprocal constructions.

¹⁸ Cf. Lat. *alius*, Greek ἄλλός, *n* instead of *l* in Indo-Iranian (Vedic *anyó-*, Avestan *añīia-*) may be a secondary replacement, perhaps under the influence of **ántara-* ‘different, another’; see Mayrhofer (1986–1996: I, 80).

(i) The most **stable** type is attested by Latin constructions with *alter alterum*, *alius alium* and a verbal form in the singular, which preserve the original pattern with the relatively free, not completely grammaticalized, constituent parts of the reciprocal proto-pronoun essentially intact.

(ii) **Generalization of the plural form** of RM2 is attested in Greek and, probably, in Young Avestan, which, quite interestingly, differs in that respect from the closely related Vedic.

Finally, the most radical type of grammaticalization is found in Old Indo-Aryan, which, curiously enough, partly shares this type of development with the Slavic branch. Here we observe (iii) **generalization of the singular form** for both constituents of the reciprocal pronoun, accompanied by the **loss of gender agreement** with the antecedent. The final part of this diachronic scenario is also presumably attested in Slavic – here we observe the generalization of the masculine form in Russian, as opposed to Old Church Slavonic and (early) Old Russian (where feminine forms of the constituents are still possible).

7.2 Grammaticalization of reciprocal pronouns and degrammaticalization of the middle diathesis

From the end of the early Vedic period onwards constructions with *anyo'nya* oust the archaic morphological reciprocals with the preverbs *ví-* (going back to PIE **dui-* ‘twice, in two’) and *sám* ‘together’ and middle inflexion as well as reciprocal constructions with the adverb *mithás* ‘mutually’ (see Kulikov 2002; Kulikov 2007: 716–727).

It is important to note that this process runs parallel to another crucial development in the Indo-Aryan verbal syntax (for details, see Kulikov 2012). The Proto-Indo-European middle is likely to have been employed as a syncretic marker of several intransitive derivations in the proto-language. In Vedic Sanskrit we observe the loss of many original functions of the middle type of inflexion that can be reconstructed for the Proto-Indo-European middle. In particular, the middle loses virtually all intransitivizing functions: passive, anticausative (decausative), reflexive, and reciprocal. This suggests that the diathesis opposition, albeit physically preserved in the paradigm, loses a large part of its grammatical content. Accordingly, this process can be qualified as the **degrammaticalization** of the middle, and of the middle/active opposition in general. This degrammaticalization is parallel to, and supported by, the grammaticalization of several new categories, such as passives with the suffix *-yá-*, reflexives with the reflexive pronoun *ātman-* (originally meaning ‘breath’) and reciprocals with *anyo'nya*.

Appendices

Abbreviations of texts (text sigla)

AĀ	Aitareya-Āraṇyaka
AV(Ś)	Atharvaveda, Śaunakīya recension
AVP	AV, Paippalāda recension
AVP-Kashm.	AVP, Kashmir manuscript
BĀU(K)	Bṛhad-Āraṇyaka-Upaniṣad (Kāṇva recension)
JB	Jaiminiya-Brāhmaṇa
KA	Kauṭīliya's Arthaśāstra
KpS	Kaṣiṭhala-Kaṭha-Saṃhitā
KS	Kāṭhaka(-Saṃhitā)
MBh.	Mahā-Bhārata
MS	Maitrāyaṇī Saṃhitā
PB	Pañcaviṃśa-Brāhmaṇa
Rām.	Rāmāyaṇa
RV	Ṛgveda
ŚB	Śatapatha-Brāhmaṇa
TĀ	Taittirīya-Āraṇyaka
TB	Taittirīya-Brāhmaṇa
TS	Taittirīya-Saṃhitā
X ^{m/p}	mantra or prose part of text X
YV	Yajurveda(-Saṃhitā)

Grammatical abbreviations in morphological glosses

ACC	accusative	IMPV	imperative
ACT	active	INF	infinitive
ADJ	adjective	INS	instrumental
AOR	aorist	LOC	locative
DAT	dative	M	masculine
DU	dual	MID	middle
F	feminine	NOM	nominative
FUT	future	PART	participle
GEN	genitive	PF	perfect
IMPF	imperfect	PL	plural

PREV	preverb	SG	singular
PTCL	particle	STAT	stative
PRES	present	VOC	vocative
RECP	reciprocal		

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Bionote

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